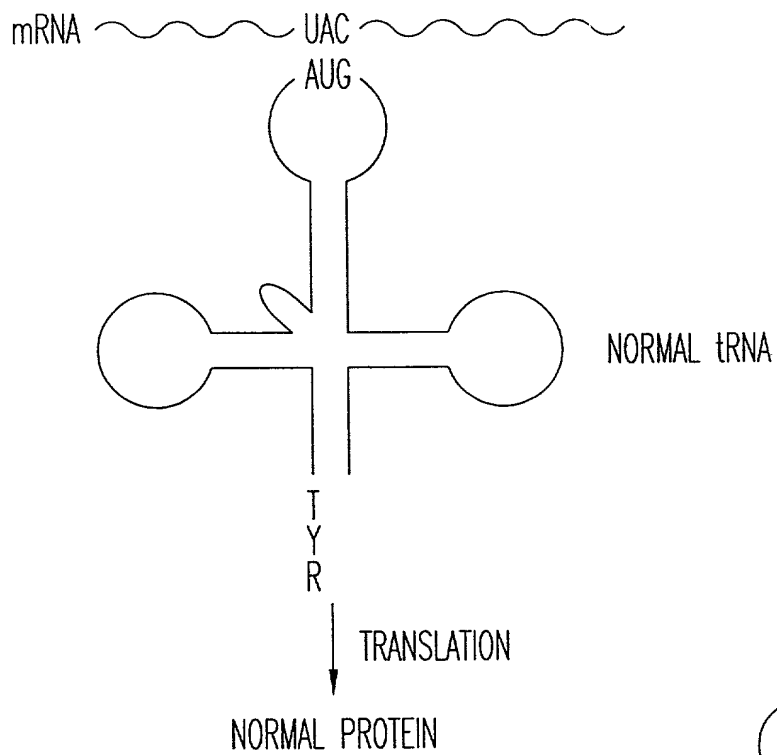
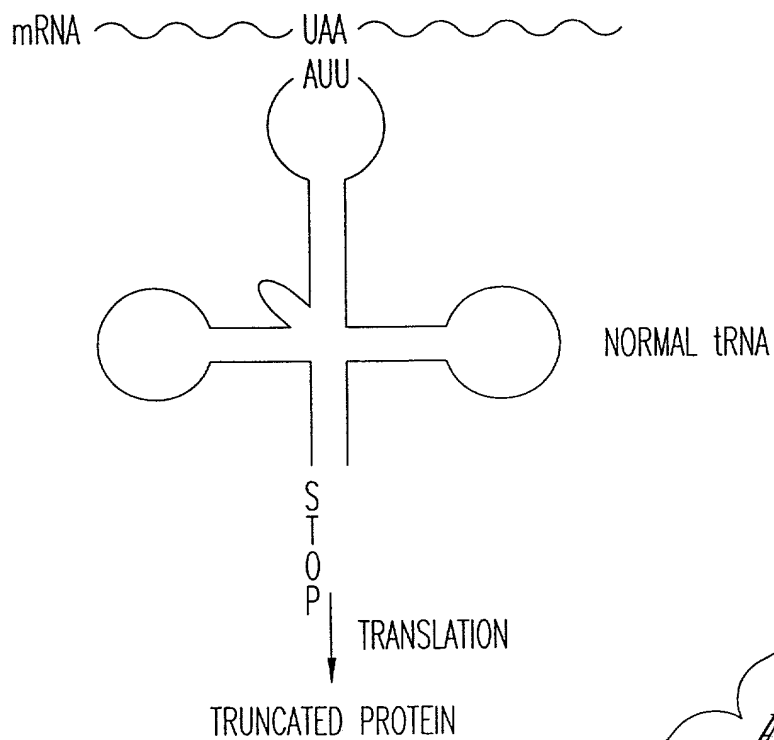


NORMAL  
mRNA



*Fig. 1A*

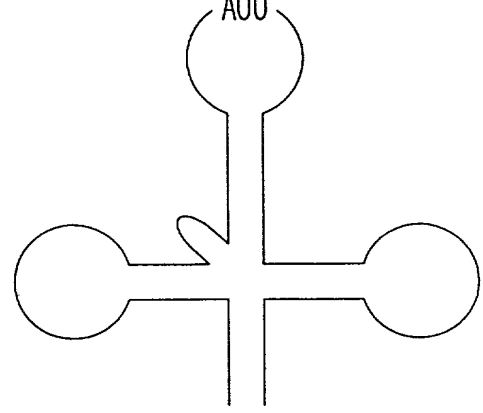
MUTANT mRNA  
WITH NONSENSE  
OCHRE MUTATION



*Fig. 1B*

MUTANT mRNA  
WITH NONSENSE  
OCHRE MUTATION

mRNA ~~~~~ UAA  
                  AUU



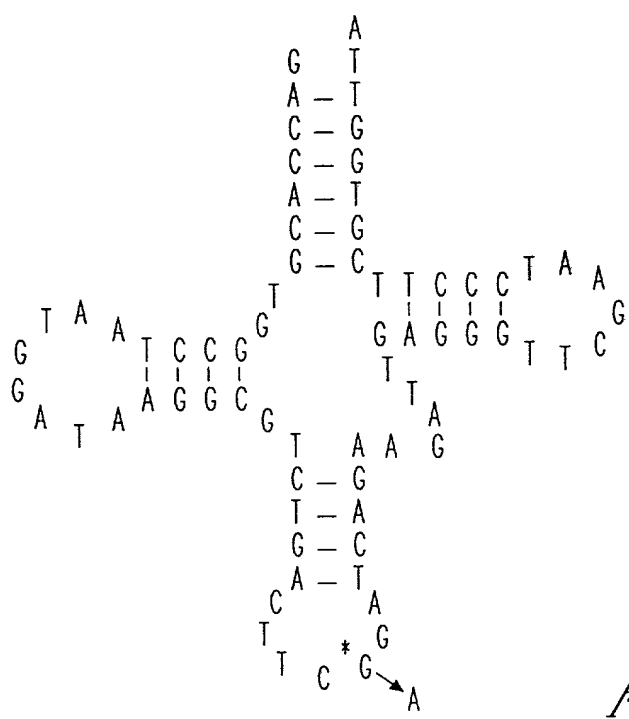
OCHRE SUPPRESSOR  
TYROSINE tRNA

T  
Y  
R

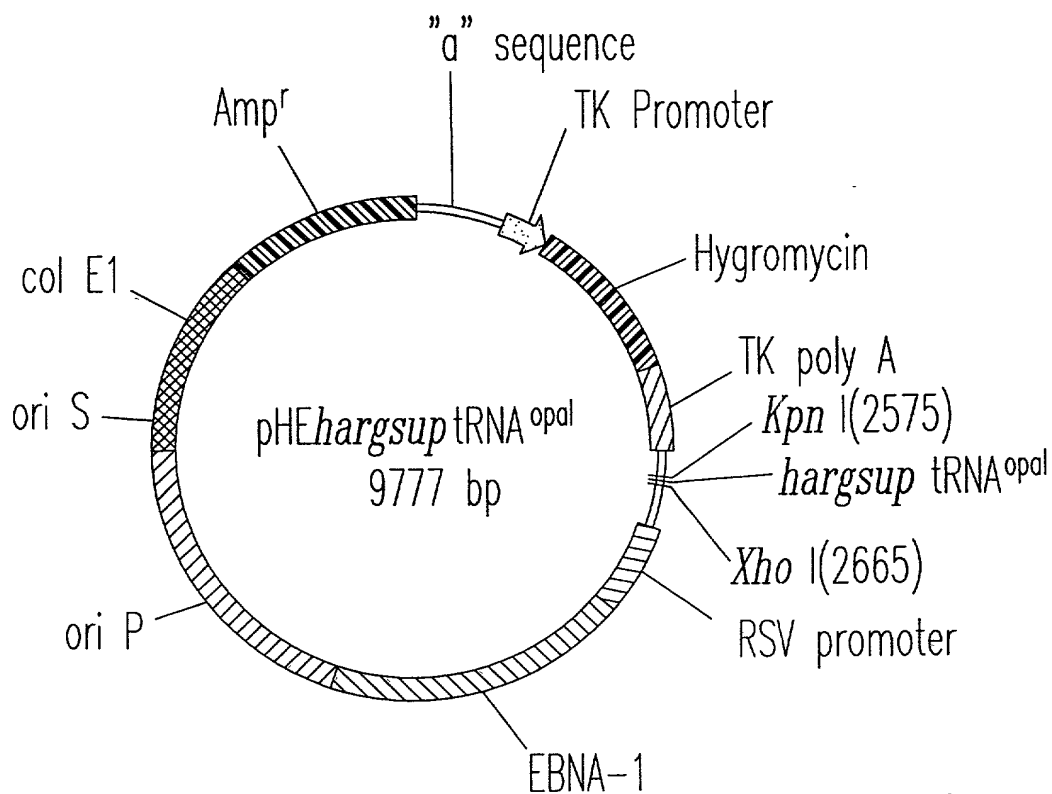
TRANSLATION

NORMAL PROTEIN

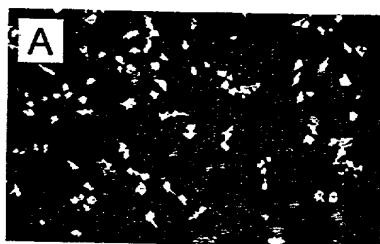
*Fig. 1C*



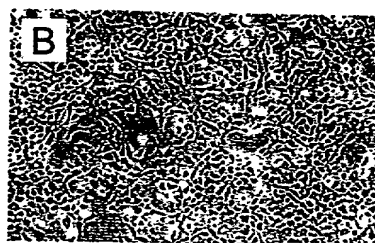
*Fig. 2A*



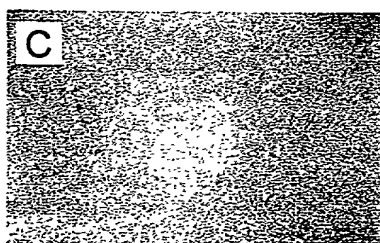
*Fig. 2B*



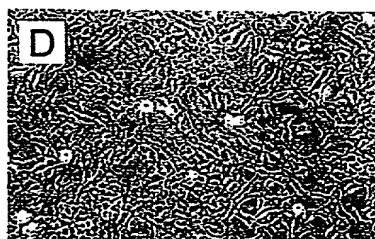
*Fig. 3A*



*Fig. 3B*

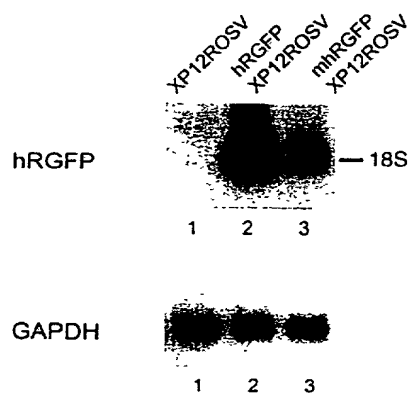


*Fig. 3C*



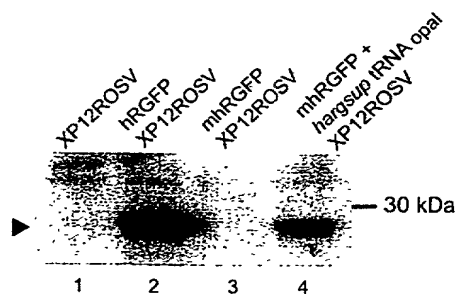
*Fig. 3D*

A.

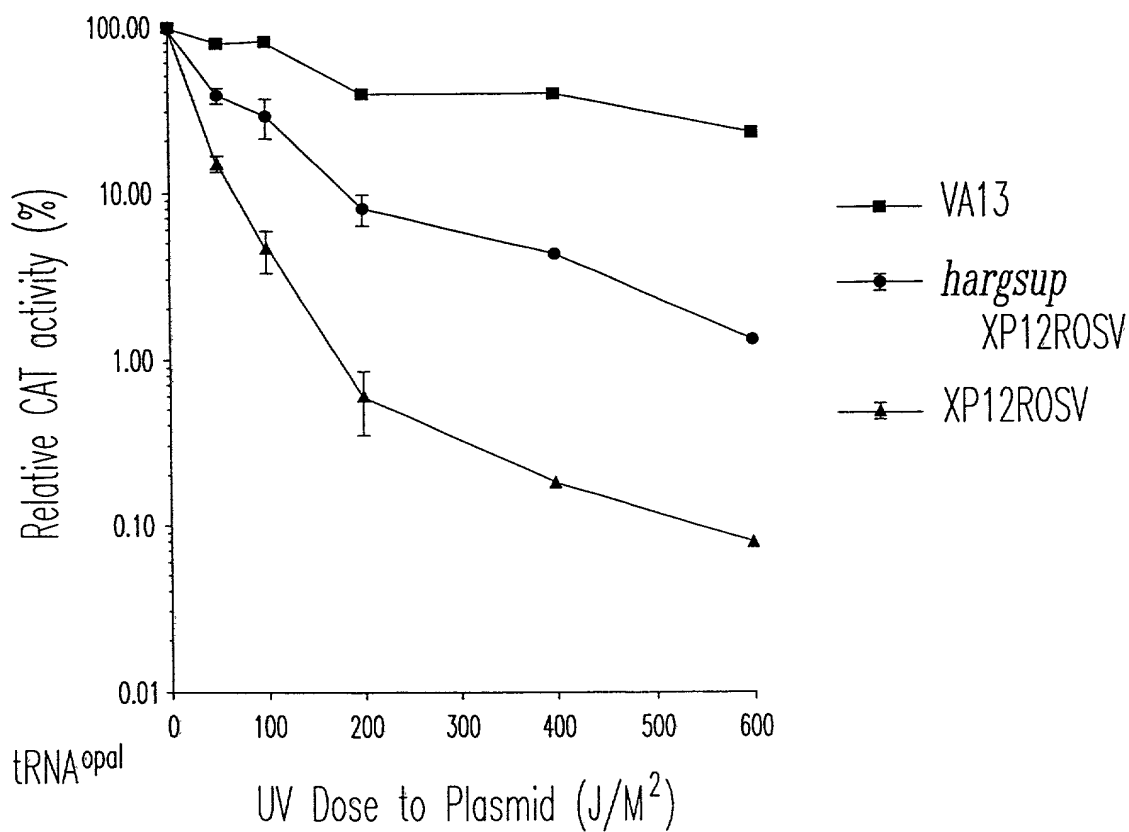
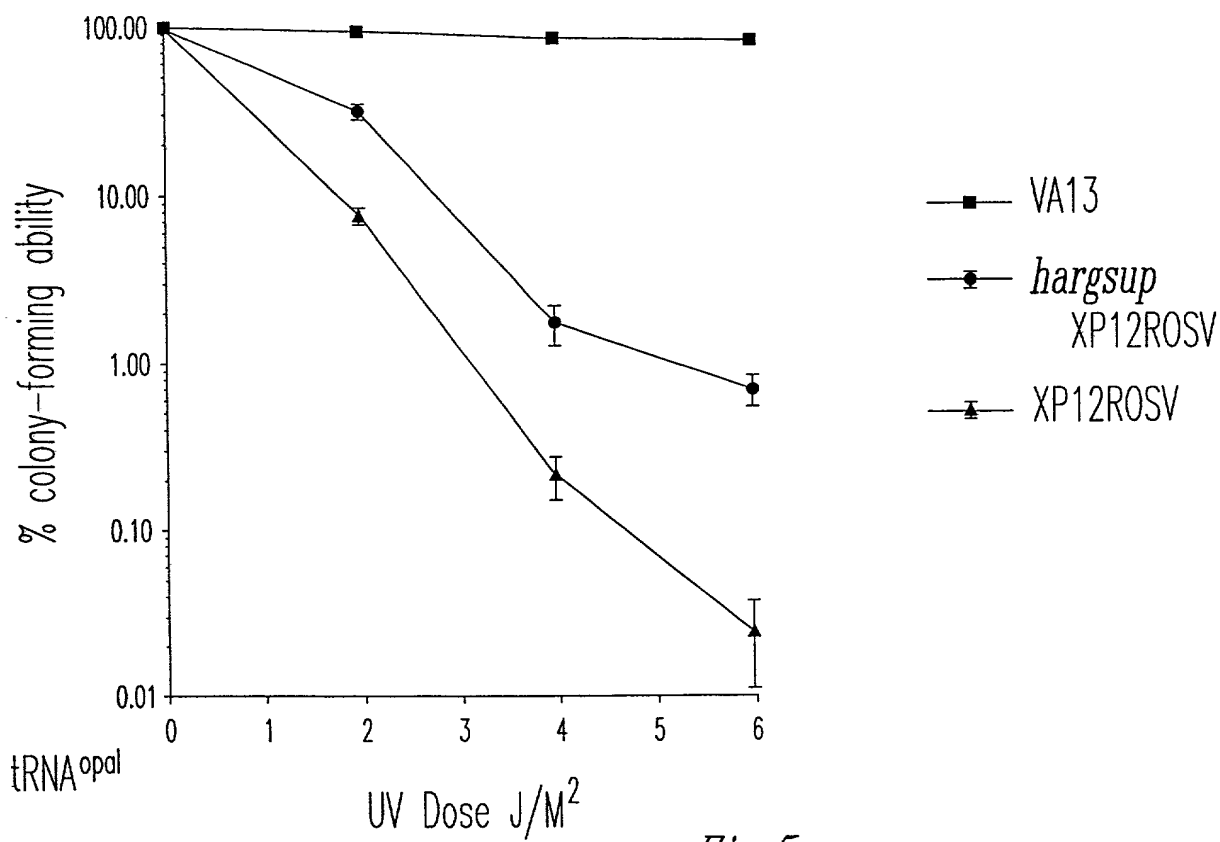


*Fig. 4A*

B.



*Fig. 4B*



A

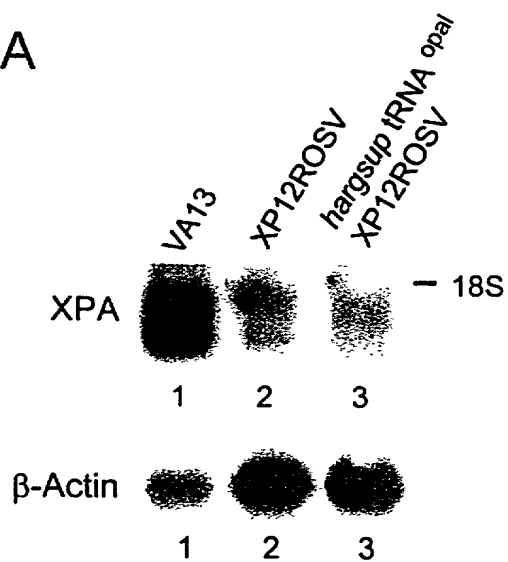
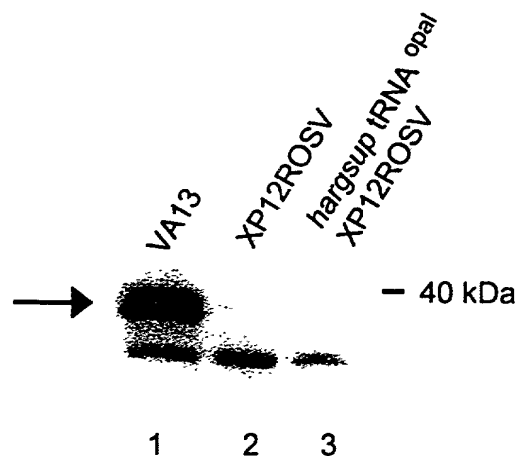


Fig. 7A

B



*Fig. 7B*

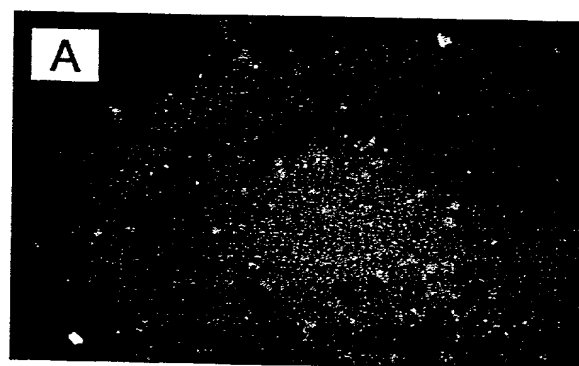
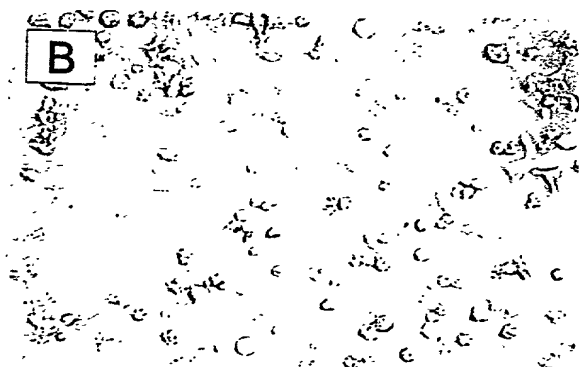


Fig. 8A



*Fig. 8B*

# Human Opal/Amber Suppressor Ser tRNA (del CCA at the 3' end)

pHE 850

## Human opal suppressor serine tRNA (using oligos RgP 24/25)

5' gagcggtaccagtaaaaaaagcagccgtagtcggcaggatttcgaacctgcggggggagaccaccaatggatttgaagtccatcgcccttaaccactcggccacgactaccagctggcg  
 3' cgcgcgcatcgctcatttttttcgtcgccgcatcagccgtcctaagcttggacggcccccctctggggttacctaacttcagggtagccggaattggtagcccggtgctgattggttcgac  
 Kpn I Pvu II

## Human amber suppressor serine tRNA (using oligos RgP 18/4)

5' gagcctcgagagtaaaaaaagcagccgtagtcggcaggatttcgaacctgcggggggagaccaccaatggatttagagtcctatcgcccttaaccactcggccacgactaccggtaccg  
 3' cgcgcgagctcctcatttttttcgtcgccgcatcagccgtcctaagcttggacggcccccctctggggttacctaacttcaggtagcgggaattggtagcccggtgctgattggttcgac  
 Xho I Kpn I

## Human ochre suppressor serine tRNA (using oligos RgP 73/74)

5' gagcgctagcagtaaaaaaagcagccgtagtcggcaggatttcgaacctgcggggggagaccaccaatggattttaaagtcctatcgcccttaaccactcggccacgactaccctcgag  
 3' cgcgcgagctcctcatttttttcgtcgccgcatcagccgtcctaagcttggacggcccccctctggggttacctaacttcaggtagcgggaattggtagcccggtgctgattggttcgac  
 Nhe I Xho I

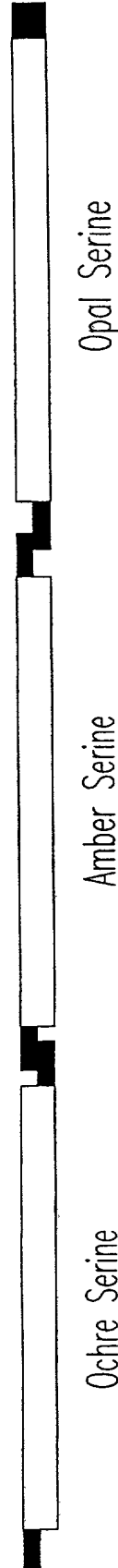


Fig. 9





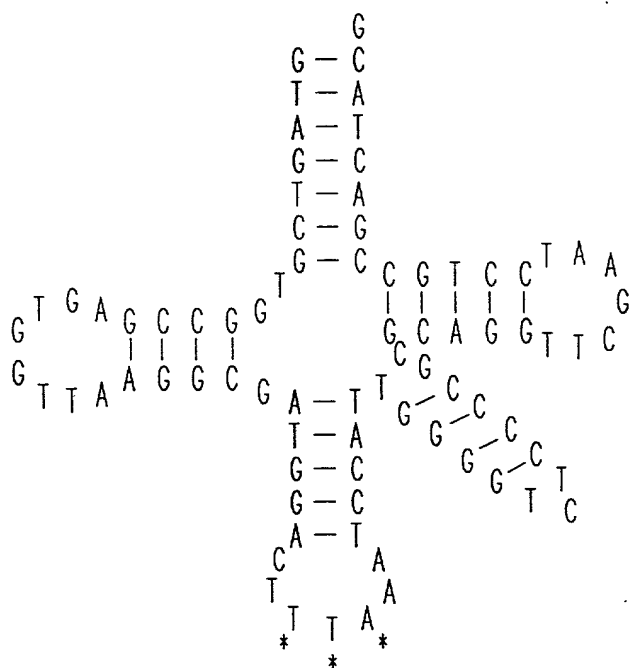


Fig. 11

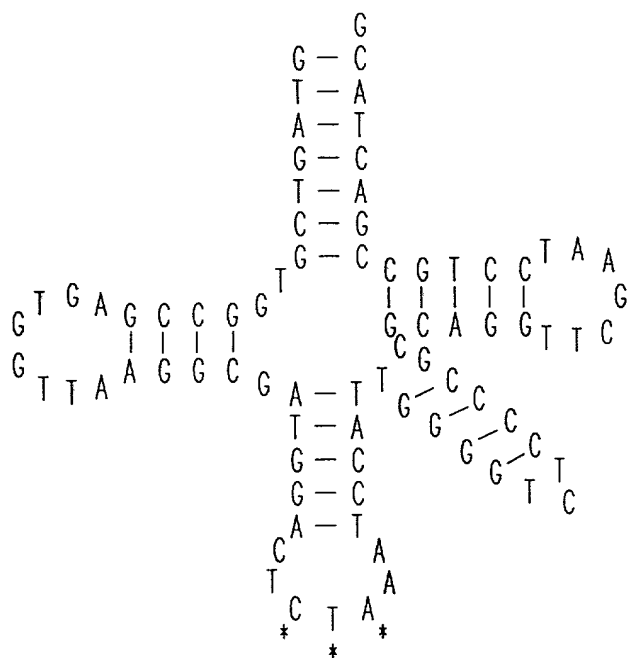


Fig. 12

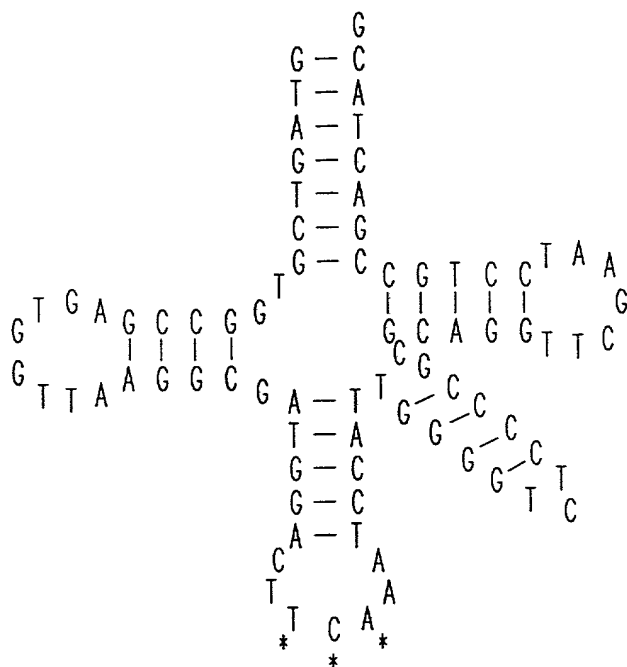


Fig. 13

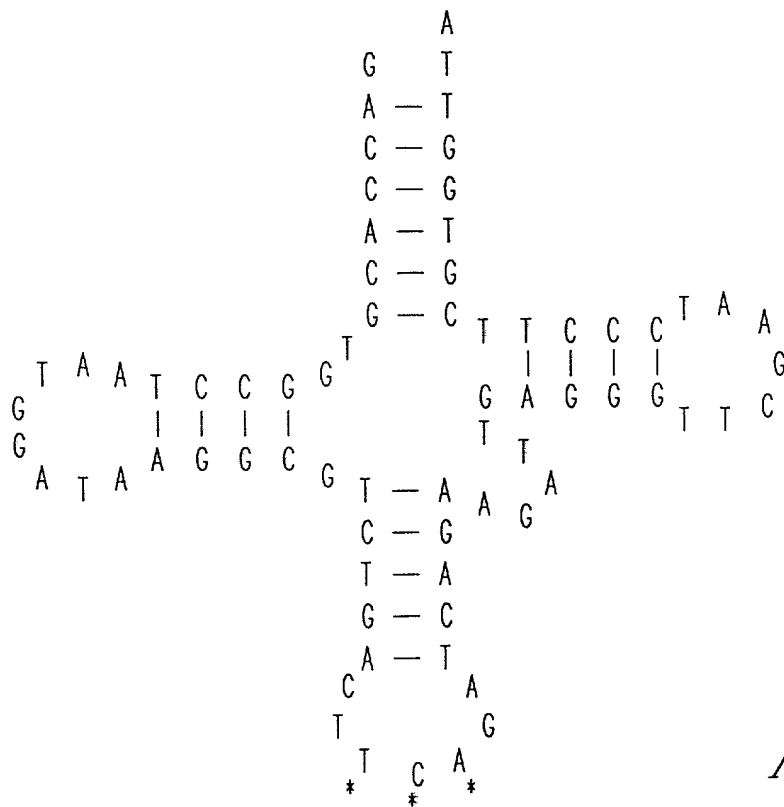


Fig. 14